## **ABSTRACT**

The present invention relates to a molecular spacer arm, to a process for attachment of a molecular unit to a solid support, and also to the use of this spacer arm on analytical chips comprising molecules or biomolecules. The spacer arm has the formula (I):

$$[mo] - X^4$$

$$X^3$$

$$R^3$$

$$[Gp]$$

$$X^2$$

$$X^2$$

$$X^2$$

$$X^3$$

$$X^4$$

$$X^2$$

$$X^2$$

$$X^2$$

$$X^2$$

$$X^3$$

$$X^3$$

$$X^4$$

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$$X^3$$

$$X^4$$

$$X^3$$

$$X^4$$

$$X^3$$

$$X^4$$

$$X^5$$

$$X^5$$

$$X^6$$

$$X^7$$

in which  $X^0$ ,  $X^4$  = C, O, S, Se, N, P, As;  $X^{1-3}$  = C, O, N, S, Se, P, As, or  $C_{1-6}$  aryl or heteroaryl;  $Z^{1-2}$  = C-R, 10 Si-R, N, P and As, where R =  $C_{1-6}$  alkyl;  $R^{1-3}$  = H, or  $C_{1-6}$  alkyl, aryl or heteroaryl; [Gp] = protective group for >N; n, m and p = integers  $\geq$  1; [Sup] = H or a silanized solid support; and [mo] = H or a molecular unit intended to be covalently attached to said silanized solid support by means of said spacer arm.